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FILE 'MEDLINE' ENTERED AT 09:04:45 ON 02 AUG 2000

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FILE 'TOXLINE' ENTERED AT 09:04:45 ON 02 AUG 2000

=> s L1

L2 5480 L1

=> s L2 and (hydroly?(w)propionamide)

L3 1 L2 AND (HYDROLY?(W) PROPIONAMIDE)

=> d 13 ibib ab

L3 ANSWER 1 OF 1 MEDLINE
 ACCESSION NUMBER: 91159474 MEDLINE
 DOCUMENT NUMBER: 91159474
 TITLE: Cloning and characterization of an amidase gene from Rhodococcus species N-774 and its expression in Escherichia coli.
 AUTHOR: Hashimoto Y; Nishiyama M; Ikehata O; Horinouchi S; Beppu T
 CORPORATE SOURCE: Department of Agricultural Chemistry, University of Tokyo, Japan..
 SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1991 Feb 16) 1088 (2) 225-33.
 JOURNAL code: AOW. ISSN: 0006-3002.
 PUB. COUNTRY: Netherlands
 LANGUAGE: English
 FILE SEGMENT: Priority Journals; Cancer Journals
 OTHER SOURCE: GENBANK-X54074; GENBANK-X54747; GENBANK-X54748;
 GENBANK-S57579; GENBANK-S59357; GENBANK-M75971;
 GENBANK-M75972; GENBANK-M75973; GENBANK-M75974;
 GENBANK-M75975
 ENTRY MONTH: 199106
 AB For investigation of an unknown open reading frame which is present upstream of the nitrile hydratase (NHase) gene from Rhodococcus sp. N-774, a longer DNA fragment covering the entire gene was cloned in Escherichia coli. Nucleotide sequencing and detailed subcloning experiments predicted a single open reading frame consisting of 521 amino acid residues of Mr 54,671. The amino acid sequence, especially its NH₂-terminal portion, showed significant homology with those of indoleacetamide hydrolases from Pseudomonas savastanoi and Agrobacterium tumefaciens, and acetamidase from Aspergillus nidulans. The 521-amino acid coding region was therefore

expressed by use of the E. coli lac promoter in E. coli, and was found to direct a considerable amidase activity. This amidase **hydrolyzed propionamide** efficiently, and also hydrolyzed, at a lower efficiency, acetamide, acrylamide and indoleacetamide. These data clearly show that the unknown open reading frame present upstream of the NHase coding region encodes an amidase. Because the TAG translational stop codon

of the amidase is located only 75 base pairs apart from the ATG start codon of the alpha-subunit of NHase, these genes are probably translated in a polycistronic manner.

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(FILE 'HOME' ENTERED AT 09:02:05 ON 02 AUG 2000)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPY, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 09:02:57 ON 02 AUG 2000

SEA AMIDOHYDROLASE

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18 FILE ANABSTR
7 FILE AQUASCI
45 FILE BIOBUSINESS
3 FILE BIOCOMMERCE
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140 FILE ESBIOTBASE
5 FILE FROSTI
29 FILE FSTA
339 FILE GENBANK
1 FILE HEALSAFE

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| NEWS | 2 | Dec | 17 | Expanded CAPLUS Coverage of US, Japanese, WIPO, EPO, and German patents |
| NEWS | 3 | Feb | 1 | Addition of Machine-Translated Abstracts to CAPLUS |
| NEWS | 4 | Feb | 28 | Patent Information Now Searchable in CAOLD SDI/UPDATE SEARCH FIELD |
| NEWS | 5 | May | 1 | RN CROSSOVER AND ANSWER SIZE LIMITS INCREASED |
| NEWS | 6 | May | 22 | CITED REFERENCES NOW AVAILABLE IN CAPLUS AND CA FILE |
| NEWS | 7 | May | 22 | POSTPROCESSING OF SEARCH RESULTS MAY BE AFFECTED BY ADDITION OF CITED REFERENCES TO CAPLUS, CA, REGISTRY, CASREACT, MARPAT, and MARPATPREV |
| NEWS | 8 | Jun | 2 | KOREAN PATENTS NOW IN CAS DATABASES |
| NEWS | 9 | Jun | 20 | WIPO/PCT Patents Fulltext Database now on STN |
| NEWS | 10 | Jun | 28 | CAS covers Web-distributed preprints |
| NEWS | 11 | Jul | 7 | Patent Full-text Cluster, PNTTEXT, introduced |
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| NEWS | 13 | Jul | 27 | MORE FREQUENT UPDATES FOR DERWENT WORLD PATENTS INDEX IN 2000 |
| NEWS | 14 | Jul | 27 | Derwent Journal Of Synthetic Methods Reloaded with New Data |
| NEWS | 15 | Jul | 27 | DERWENT WORLD PATENTS INDEX: FAST TRACK RELEASE OF EQUIVALENT PATENTS |
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* The files listed above are temporarily unavailable.

FILE 'HOME' ENTERED AT 09:02:05 ON 02 AUG 2000

⇒ index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.30 | 0.30 |

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 09:02:57 ON 02 AUG 2000

57 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s amidohydrolase

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  4018  FILE MEDLINE
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=> d rank

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| F44 | 1 | DRUGLAUNCH |
| F45 | 1 | EMBAL |
| F46 | 1 | HEALSAFE |

=> file medline caplus scisearch toxline

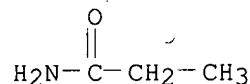
=> s E3;D

L1 1 PROPIONAMIDE/CN

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS
RN 79-05-0 REGISTRY
CN Propanamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propionamide (6CI, 8CI)
OTHER NAMES:
CN Propanimidic acid
CN Propionic acid amide
CN Propionic amide
CN Propionimidic acid
CN Propylamide
FS 3D CONCORD
MF C3 H7 N O
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST,
CIN, CSCHEM, DETHERM*, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB,
MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, RTECS*, SPECINFO, TOXLINE,
TOXLIT, TULSA, USPATFULL
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Other Sources: EINECS**, NDSL**, TSCA**

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794 REFERENCES IN FILE CA (1967 TO DATE)
26 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
794 REFERENCES IN FILE CAPLUS (1967 TO DATE)
67 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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PUB. COUNTRY: Journal code: AOW. ISSN: 0006-3002.
Netherlands
Journal; Article; (JOURNAL ARTICLE)
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